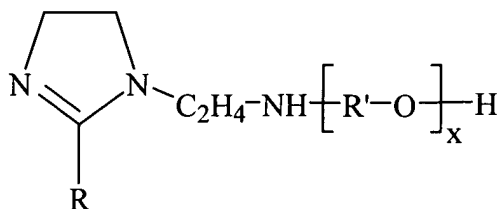


1 **WHAT IS CLAIMED IS:**

- 2 1. A fluid having utility in subterranean wells, said fluid comprising:
3 an oleaginous fluid; and
4 a solids tolerance agent having the formula:



6 wherein R is a C₆ to C₂₀ aliphatic group and R' is a C₂ to C₆ aliphatic group and x
7 has a value from about 1 to about 10.

- 8
- 9 2. The fluid of claim 1, wherein R' is selected from ethyl and isopropyl.
- 10
- 11 3. The fluid of claim 1 wherein R is unsaturated.
- 12
- 13 4. The fluid of claim 1 wherein said oleaginous fluid comprises from about 30% to
14 about 99% by volume of said fluid.
- 15
- 16 5. The fluid of claim 1 wherein said oleaginous fluid further comprising from about
17 5% to about 100% by volume of the oleaginous fluid of a material selected from a group
18 consisting of diesel oil, mineral oil, synthetic oil, esters, ethers, acetals, di-
19 alkylcarbonates, olefins, and combinations thereof.
- 20
- 21 6. The fluid of claim 1, further comprising a non-oleaginous fluid.
- 22
- 23 7. The fluid of claim 6 wherein said non-oleaginous fluid comprises from about 1%
24 to about 70% by volume of said fluid.
- 25

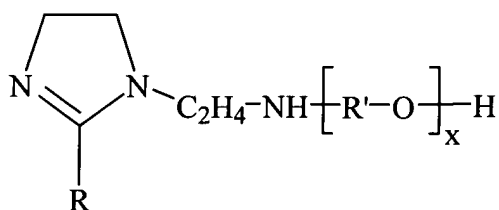
8. The fluid of claim 6 wherein said non-oleaginous fluid is selected from the group consisting of sea water, a brine containing organic or inorganic dissolved salts, a liquid containing water-miscible organic compounds, and combinations thereof.

9. The fluid of claim 1 further comprising a weighting agent or a bridging agent.

10. The fluid of claim 9 wherein the weighting or bridging agent is selected from the group consisting of calcium carbonate, dolomite, siderite, barite, celestite, iron oxides, manganese oxides, ulexite, carnalite, sodium chloride and combinations thereof

11. An invert emulsion fluid having utility for drilling, completing, or working over subterranean wells, said fluid comprising:

- a) an oleaginous liquid, said oleaginous liquid comprising from about 30% to about 99% by volume of said fluid;
- b) a non-oleaginous liquid, said non-oleaginous liquid comprising from about 1% to about 70% by volume of said fluid; and
- c) an solids tolerance agent present in said fluid at a concentration of about 0.1% to 5.0% by weight of said fluid, said solids tolerance agent having the formula:



wherein R is a C₆ to C₂₀ aliphatic group and R' is a C₂ to C₆ aliphatic group and x has a value from about 1 to about 10.

12. The invert emulsion fluid of claim 11 wherein R' is selected from ethyl and isopropyl.

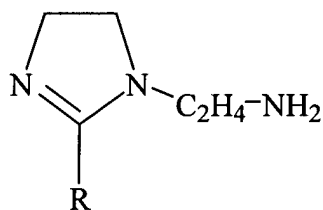
1
2 13. The invert emulsion fluid of claim 11 wherein R is unsaturated.

3
4 14. The invert emulsion fluid of claim 11 wherein said oleaginous fluid further
5 comprising from about 5 to about 100% by volume of the oleaginous fluid of a material
6 selected from a group consisting of diesel oil, mineral oil, a synthetic oil, esters, ethers,
7 acetals, di-alkylcarbonates, hydrocarbons, and combinations thereof.

8
9 15. The invert emulsion fluid of claim 11 wherein said non-oleaginous liquid is
10 selected from the group consisting of sea water, a brine containing organic or inorganic
11 dissolved salts, a liquid containing water-miscible organic compounds, and combinations
12 thereof.

13
14 16. The invert emulsion fluid of claim 11 wherein R is unsaturated.

15
16 17. A fluid having utility in subterranean wells, said fluid comprising:
17 an oleaginous fluid and
18 a solids tolerance agent that is the product of the reaction of an alkylene
19 oxide with an imidazoline of a fatty acid having the formula



20
21 wherein R is a C₆ to C₂₀ aliphatic group.

22
23 18. The fluid of claim 17 wherein the imidazoline is the reaction product of a
24 condensation reaction of a C₆ to C₂₀ fatty acid and diethyltriamine.

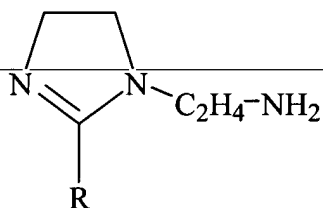
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- 1 19. The fluid of claim 17 wherein the alkylene oxide is selected from C₂ to C₄
2 alkylene oxides.
3
- 4 20. The fluid of claim 17 wherein the alkylene oxide is selected from ethylene oxide
5 and propylene oxide.
6
- 7 21. The fluid of claim 17 wherein the molar ratio of imidazoline to alkylene oxide is
8 from about 2:1 to about 1:10.
9
- 10 22. The fluid of claim 17 wherein said oleaginous fluid comprises from about 30% to
11 about 99% by volume of said fluid.
12
- 13 23. The fluid of claim 17 wherein said oleaginous fluid further comprising from about
14 5% to about 100% by volume of the oleaginous fluid of a material selected from a group
15 consisting of diesel oil, mineral oil, synthetic oil, esters, ethers, acetals, di-
16 alkylcarbonates, olefins, and combinations thereof.
17
- 18 24. The fluid of claim 17 further comprising a non-oleaginous fluid.
19
- 20 25. The fluid of claim 24 wherein said non-oleaginous fluid comprises from about 1%
21 to about 70% by volume of said fluid.
22
- 23 26. The fluid of claim 25 wherein said non-oleaginous fluid is selected from the group
24 consisting of sea water, a brine containing organic or inorganic dissolved salts, a liquid
25 containing water-miscible organic compounds, and combinations thereof.
26
- 27 27. The fluid of claim 17 further comprising a weighting agent or a bridging agent.
28

1 28. The fluid of claim 27 wherein the weighting or bridging agent is selected from the
2 group consisting of calcium carbonate, dolomite, siderite, barite, celestite, iron oxides,
3 manganese oxides, ulexite, carnalite, sodium chloride and combinations thereof.

4
5 29. A method of forming a subterranean well, the method comprising
6 drilling the subterranean well with a rotary drill bit and a drilling fluid; said
7 drilling fluid including:

8 an oleaginous based continuous phase and
9 a solids tolerance agent that is the product of the reaction of an alkylene
10 oxide with an imidazoline of a fatty acid having the formula



11
12 wherein R is a C₆ to C₂₀ aliphatic group.

13
14 30. The fluid of claim 29 wherein the imidazoline is the reaction product of a
15 condensation reaction of a C₆ to C₂₀ fatty acid and diethyltriamine.

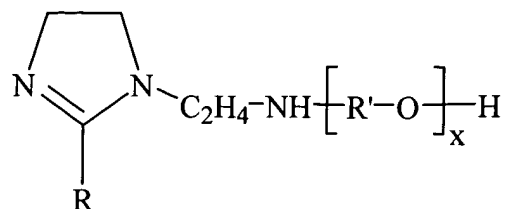
16
17 31. The fluid of claim 29 wherein the alkylene oxide is selected from C₂ to C₄
18 alkylene oxides.

19
20 32. The fluid of claim 29 wherein the alkylene oxide is selected from ethylene oxide
21 and propylene oxide.

22
23 33. The fluid of claim 29 wherein the molar ratio of imidazoline to alkylene oxide is
24 from 2:1 to about 1:10.

25

1 34. In a method of rotary drilling a subterranean well using a drilling fluid, the
2 improvement comprising the use of a drilling fluid including:
3 an oleaginous fluid; and
4 a solids tolerance agent having the formula:



5
6 wherein R is a C₆ to C₂₀ aliphatic group and R' is a C₂ to C₆ aliphatic group and x
7 has a value from about 1 to about 10.
8

9 35. The fluid of claim 34, wherein R' is selected from ethyl and isopropyl.

10
11 36. The fluid of claim 34 wherein R is unsaturated.
12